



Appendix A

GLOSSARY

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Included in the following pages are a number of terms with appropriate definitions to assist the reader in understanding the technical language included in this document.

Air carrier: an operator which: (1) performs at least five round trips per week between two or more points and publish flight schedules which specify the times, days of the week and places between which such flights are performed; or (2) transport mail by air pursuant to a current contract with the U.S. Postal Service. Certified in accordance with Federal Aviation Regulation (FAR) Parts 121 and 127.

Air taxi: An air carrier certificated in accordance with FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Generally operates small aircraft "for hire" for specific trips.

Air traffic control tower (ATCT): a central operations facility in the terminal air traffic control system, consisting of a tower, including an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling, and other devices to provide safe and expeditious movement of terminal air traffic.

Air route traffic control center (ARTCC): a facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.

Airport Elevation: the highest point on an airport's usable runway expressed in feet about mean sea level (MSL).

Approach lighting system (ALS): an airport lighting facility which provides visual guidance to landing aircraft by radiating light beams by which the pilot aligns the aircraft with the extended centerline of the runway on his final approach and landing.

Azimuth: horizontal direction or bearing; usually measured from the reference point of 0 degrees clockwise through 360 degrees.

Base leg: a flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline.

Busy Day - The busy day of a typical week in the peak month.

Compass locator (LOM): a low power low/medium frequency radio-beacon installed in conjunction with the instrument landing system at one or two of the marker sites.

Design Day: the average day in the peak month. This indicator is easily derived by dividing the peak month operations by the number of days in a month.

Design Hour: the peak hour within the design day.

Displaced threshold: a threshold that is located at a point on the runway other than the designated beginning of the runway.

Distance measuring equipment (DME): equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.

DNL: day-night noise level. The daily average noise metric in which that noise occurring between 10:00 p.m. and 7:00 a.m. is penalized by 10 times.

Downwind leg: a flight path parallel to the landing runway in the direction *opposite* to landing.

Duration: length of time, in seconds, a noise event such as an aircraft flyover is experienced. (May refer to the length of time a noise event exceeds a specified threshold level.)

Enplaned passengers: the total number of revenue passengers boarding aircraft, including originating, stop-over, and transfer passengers, in scheduled and non-scheduled services.

Fixed base operator (FBO): a provider of service to users of an airport. Such services include, but are not limited to, fueling, hangaring, flight training, repair and maintenance.

General aviation: that portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity, and large aircraft commercial operators.

Glide slope: electrical equipment that emits signals which provide vertical guidance by reference to airborne instruments during instrument approaches such as an ILS, or visual ground aids, such as VASI, which provide vertical guidance for a VFR approach or for the visual portion of an instrument approach and landing.

Global positioning system (GPS): a navigational technology based on a constellation of satellites orbiting approximately 11,000 miles above the surface of the earth.

Ground effect: the excess attenuation attributed to absorption or reflection of noise by man-made or natural features on the ground surface.

Instrument approach: a series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority.

Instrument flight rules (IFR): rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

Instrument landing system (ILS): a precision instrument approach system which normally consists of the following electronic components and visual aids: localizer, glide slope, outer marker, middle market, and approach lights.

Itinerant operation: a take-off or landing performed by aircraft with a specific origin or destination away from the airport.

Local operation: a takeoff or landing performed by an aircraft that operates within site of the airport or which executes simulated touch-and-go operations at the airport.

Localizer (LOC): providing horizontal guidance to the runway centerline for aircraft during approach and landing by radiating a directional pattern of radio waves modulated by two signals which, when received with equal intensity, are displayed by compatible airborne equipment as an "on-course" indication, and when received in unequal intensity are displayed as an "off-course" indication.

Localizer type directional aid (LDA): a facility of comparable utility and accuracy to a localizer, but is not part of a complete ILS and is not aligned with the runway.

Medium intensity approach light system (MALSL): an airport lighting facility in the terminal navigation system providing visual guidance to pilots by radiating medium intensity focused light beams by which the pilot visually aligns the aircraft with the extended runway centerline.

Microwave landing system (MLS): an instrument approach and landing system that provides precision guidance in azimuth, elevation, and distance measurement.

Missed approach: an instrument approach not completed by landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or other reasons.

Non-directional beacon (NDB): a radio beacon transmitting non-directional signals that a pilot of an aircraft equipped with direction finding equipment can determine his/her bearing to or from the radio beacon and "home" on or track to or from the station. When the radio beacon is installed in conjunction with the instrument landing system market, it is normally called a compass locator.

Nonprecision approach procedure: a standard instrument approach procedure in which no electronic glide slope is provided, such as VOR, TACAN, NDB, or LOC.

Operation: a take-off or a landing.

Outer marker (OM): an ILS navigation facility in the terminal area navigation system located four to seven miles from the runway edge on the extended centerline indicating to the pilot, that he/she is passing over the facility and can begin final approach.

Peak Month: the calendar month when peak aircraft operations occur.

Precision approach path indicator (PAPI): an airport lighting facility in the terminal area navigation system used primarily under VFR conditions. The PAPI provides visual descent guidance to aircraft on approach to landing through a single row of two to four lights, radiating a high intensity red or white beam to indicate whether the pilot is above or below the required approach path to the runway. The PAPI has an effective visual range of 5 miles during the day and 20 miles at night.

Precision approach procedure: a standard instrument approach procedure in which an electronic glide slope is provided, such as ILS.

Precision instrument runway: a runway having an existing instrument landing system (ILS).

Reliever airport: an airport to serve general aviation aircraft which might otherwise use a congested air-carrier served airport.

Runway alignment indicator lights (RAIL): airport lighting facility consisting of five or more sequenced flashing lights on the extended centerline of the runway. When co-located with MALS, the system is denoted as MALSR.

Runway end identification lights (REIL): an airport lighting facility in the terminal area navigational system consisting of one flashing white high intensity

light installed at each approach end corner of a runway and directed toward the approach zone, which enables the pilot to identify the threshold of a usable runway.

Runway Protection Zone (RPZ): an area off the runway end to enhance the protection of people and property on the ground.

Runway Safety Area (RSA): a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

Runway Threshold: the beginning of that portion of the runway available for landing. In some instances, the landing threshold may be displaced.

Short approach light system (SALS): a shorter approach light system only 1,500 feet long.

Threshold Elevation: the elevation of the runway threshold, expressed in feet above mean sea level (MSL).

Touch-and-Go Operations: aircraft executing simulated approaches or low passes at the airport.

Touchdown Zone: the first 3,000 feet of runway beginning at the threshold.

Vector: a heading issued to an aircraft to provide navigational guidance by radar.

Victor airway: a control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids.

Visual approach: an approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic facility and having an air traffic control authorization, may proceed to the airport of destination in VFR conditions.

Visual approach slope indicator (VASI): an airport lighting facility in the terminal area navigation system used primarily under VFR conditions. It provides vertical visual guidance to aircraft during approach and landing, by radiating a pattern of high intensity red and white focused light beams which indicate to the pilot that he/she is above, on, or below the glide path.

Visual flight rules (VFR): rules that govern the procedures for conducting flight under visual conditions. The term **VFR** is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

VOR/Very high frequency omnidirectional range station: a ground-based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. Used as the basis for navigation in the national airspace system. The VOR periodically identifies itself by Morse Code and may have an additional voice identification feature.

VORTAC/VHF Omnidirectional range/tactical air navigation: a navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance-measuring equipment (DME) at one site.

ABBREVIATIONS

AGL:	above ground level
ALS:	approach lighting system
ARTCC:	air route traffic control center
ATCT:	airport traffic control tower
DME:	distance measuring equipment
DNL:	day-night noise level
DW:	runway weight bearing capacity for aircraft with dual-wheel type landing gear
DTW:	runway weight bearing capacity for aircraft with dual-tandem type landing gear
FAA:	Federal Aviation Administration
FAR:	Federal Aviation Regulation
FBO:	fixed base operator
GPS:	global positioning system
GS:	glide slope
IFR:	instrument flight rules (FAR Part 91)
ILS:	instrument landing system
LMM:	compass locator at middle marker
LOC:	ILS localizer
LOM:	compass locator at outer marker
MALSR:	medium intensity approach lighting system with runway alignment indicator lights
MLS:	microwave landing system

MM: middle marker

MSL: mean sea level

NAVAID: navigational aid

NDB: non-directional beacon

OM: outer marker

PAPI: precision approach path indicator

RAIL: runway alignment indicator lights

SEL: sound exposure level

SALS: short approach light system

SW: runway weight bearing capacity for aircraft with single-wheel type landing gear

TRACON: terminal radar approach control

VASI: visual approach slope indicator

VFR: visual flight rules (FAR Part 91)

VHF: very high frequency

VOR: very high frequency omnidirectional range

VORTAC: (see VOR and TACAN)